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ABSTRACT

A data processing system receives a continuous stream of real time transactional data regarding market transactions of fixed income securities. The incoming data is qualified and then used to determine the term structure of interest rates based on price information. The system provides linear interpolation techniques to complete an operative data set. This set is updated with current trade data, with term structure shifting using pivot points from newly qualified data. An index value for a pre-select portfolio of securities is then calculated and expressed in terms of price relative to par, yield to maturity and duration.

~~In a specific implementation using U.S. Treasuries as the~~
monitored security, the index value supports an automated
trading function for futures and/or options contracts based on
the change in value of the index. The index provides a more
accurate barometer of market changes and a more useful tool in
measuring portfolio management for plan sponsors.